

CLAIMS

1. A method for producing a solid electrolytic capacitor, wherein a solid electrolytic capacitor element comprises an anode body composed of a material containing at least one member selected from a group consisting of an earth-acid metal, an alloy comprising an earth-acid metal as the main component, an electrically conducting oxide of an earth-acid metal and a mixture of two or more thereof, a dielectric layer formed on the anode body by electrolytic oxidation (electrochemical formation) and comprising an oxide as the main component, a semiconductor layer formed on the dielectric layer, and an electrically conducting layer stacked on the semiconductor layer, and the solid electrolytic capacitor element is subjected to molding with a resin, curing and then voltage applying (aging) treatment, which method comprises repeating a step of leaving the resin-molded body to stand at a temperature of 225 to 305°C and a step of aging it are sequentially repeated twice or more after the above steps of molding with resin and curing.

2. The method for producing a solid electrolytic capacitor as claimed in claim 1, wherein the step of leaving the resin-molded body to stand at a temperature of 225 to 305°C is a step of performing the standing at a temperature of 225 to 305°C multiple times.

3. The method for producing a solid electrolytic capacitor as claimed in claim 1, wherein the aging step after leaving the resin-molded body to stand at a temperature of 225 to 305°C is a step of cooling the resin-molded body to a

temperature of 200°C or less to cold-resistance temperature of the capacitor and then applying a voltage.

4. The method for producing a solid electrolytic capacitor
5 as claimed in any one of claims 1 to 3, wherein the earth-
acid metal is tantalum.

5. The method for producing a solid electrolytic capacitor
as claimed in any one of claims 1 to 3, wherein the earth-
10 acid metal is niobium.

6. The method for producing a solid electrolytic capacitor
as claimed in any one of claims 1 to 3, wherein the
electrically conducting oxide of an earth-acid metal is
15 niobium oxide.

7. A solid electrolytic capacitor manufactured by the
production method as claimed in any one of claims 1 to 6.

20 8. An electronic circuit using the solid electrolytic
capacitor as claimed in claim 7.

9. An electronic device using the solid electrolytic
capacitor as claimed in 7 above.

25